

JOB THAT FITS IN THE ASEAN INTEGRATION

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Abstract

Philippines now faces a big challenge with regards to the labor force. The ASEAN Economic Community was made to integrate the economies of the member-countries. The Philippines before was behind academically because of the curriculum used. To address the problem, the Philippines uses the K-12 Program which is an international standard and what the other members of ASEAN use. So, it is important to know what jobs are in-demand so that the students will take the course for the specific job.

This study is aimed to know the in-demand jobs of the Southeast Asian nations and to help the Filipinos what's the best career path they should take for a bigger chance of getting employed in 2017. This study is only limited not beyond the year 2017. This study will help job-seekers to what jobs they have the best chance being employed.

A quantitative approach was used in this study. Data were acquired from the 10 members of the Association of the Southeast Asian Nations. Those data are the employment, enrolment, and survival rate of the professionals in each country, in which the countries differ. The countries also differ in their supply, skills, wages, and productivity. From all the acquired information, the researchers found out that the Philippines is second in the highest number of unemployed youth and ranks fourth in the employment rate.

The 10 countries also have different in-demand jobs. But all in all, the most in-demand job in Southeast Asia is engineering. This is followed by accounting, teaching, nursing, and IT.

Keywords: *ASEAN, Economic, Integration, jobs, demand*

CHAPTER 1

THE PROBLEM AND ITS SCOPE

Rationale

With the end view of changing the system to lift the status of the economy, it cannot help but to change the educational system to become standard or at par with the educational system of the neighboring countries. Apart of this plan is now the widely

known ASEAN community economic integration. Stakeholders try to catch up with this plan to see the place where they should be by 2015. The year 2015 is very crucial to stakeholders but more specifically to the academe. It is in this reason that this study is conducted. Further, although the effect maybe terrific, but the preparation is not enough. According to Jimenez, (2014) President of the Philippine Management Association of the Philippine, Philippines is not prepared for this economic integration. According to him if a member country fails to prepare for the integration it will face more risks than opportunities.

The topic is now the current issue of Philippine higher education, but there are only few sources of information regarding this. The application of this system affects the future of the graduates and the educational system. Furthermore, it is observed that this topic is not widely known but the effect would certainly be catastrophic if people are not fully aware. In order that Philippine education will have the edge over other countries, it is important to know the entire concept of this Integration. Thus, this study helps to circumspect its adverse effect.

A keen observant may notice why Philippines is lagging behind other countries in terms of educational performance. Because of this, there is job mismatch where education does not meet the need of labor market/industries, which results to the rise of unemployment rate. Filipino graduates working abroad are not at par with local or other foreign counterparts on job qualification. Thus, ASEAN economic integration in 2015 compels the Philippine educational qualification to aim for global comparability.

This is where the pendulum now swings. Stakeholders that may be affected must tighten their belt to foresee what is behind this timely, contentious and imperative integration of the ASEAN 2015. Particularly, this study is anchored on Philippine educational reform which opens the market to education. This means graduates must compete with the ASEAN members especially doctors, dentists, nurses, engineers, architects, accountants, surveyors and tourism workers. The competition, if not foreseen and prepared beforehand, might cause adverse effects to Philippine graduates. Employees who failed to improve their skills and competencies will be left behind. As such, it is but fitting to know these competitors. This study exposes the background, the strength and weakness of the ASEAN members. By then, a logical and scientific solution will be suggested. The degree programs that are necessary in the ASEAN region by 2015 onwards must be identified. In the end, a complete tabulation of the degree programs that necessary to compete Philippine graduates with other ASEAN members. In order to solve job mismatch in the Philippine, where education does not meet the industries, which results to the rise of unemployment rate, more researches on this matter should be conducted. In line with this study is the program of the government to strengthen education through several reforms embedded in different laws and executive orders. Finally, the study evaluates, sees the pros and the cons of the Asean Community Economic Integration.

Theoretical-Conceptual Framework

This study is rooted on the theory that ASEAN Economic Integration is disadvantageous to Philippine graduates; and this educational reform would only increase the unemployment rate. According to the president of PMAP (Philippine Management Association of the Philippines), Atty. Josephus B. Jimenez, Philippine labor force is not yet

fully prepared for the open market; everyone is struggling how and where to position themselves in the integration. (2014, Feb. 17. PH 'not ready' for integration. *Sunstar*. p. A20). Therefore, governments of member countries need to develop common and transparent regional standards as an important step towards enhancing student and labour mobility.

Considering that this reform has been implemented, what the best thing to do in order to achieve this end, is to guide through this study the objectives of the *Philippine Qualifications Framework (PQF)* for global competitiveness 1) *To adopt national standards and levels for outcomes of education;* 2) *To support the development and maintenance of pathways and equivalencies which, provide access to qualifications and assist people to move easily and readily between the different education and training sectors and between these sectors and the labor market;* and, 3) *To align the PQF with international qualifications framework to support the national and international mobility of workers through increased recognition of the value and comparability of Philippine qualifications.*

The above objectives have been attained by other members of the ASEAN nations. By the time we have it; other members of the ASEAN nations are already ahead of the Philippines. As a result, education in the Philippines kept on chasing the butterfly while the neighbors already have it. In the end, Philippine education will be at a losing end if rules and the circumstances are not mastered.

It is in line with this idea, that this study is timely important at the onset of this present Philippine Economic Integration 2015 to become fully aware of this phenomenon that would make or unmake this Philippine educational system. Indirectly, this would also make or unmake this country.

Accordingly, Asean economic integration is the same as EU (European Union)-plans. Prof. Chris Lorenz of the [VU University](#) has argued that: "the basic idea behind all educational EU-plans is economic: the basic idea is the enlargement of scale of the European systems of higher education, ... in order to enhance its 'competitiveness' by cutting down costs. Therefore a Europe-wide standardization of the 'values' produced in each of the national higher educational systems is called for." Just as the [World Trade Organization](#) and [GATS](#) propose educational reforms that would effectively erode all effective forms of democratic political control over higher education, so "it is obvious that the economic view on higher education recently developed and formulated by the EU Declarations is similar to and compatible with the view developed by the WTO (World Trade Organization) and by GATS (General Agreement on Trade and Services) (Chris Lorenz. May 25, 2014. Will the universities survive the European Integration? Higher Education Policies in the EU and in the Netherlands before and after Bologna Declaration. (http://www.ii.umich.edu/UMICH/ces/Home/Resources/Michigan%20Paper%20Series/Lorenz_Will_Universities_Survive.pdf).

The ASEAN Economic Community (AEC) shall be the goal of regional economic integration by 2015. AEC envisages the following key characteristics: (a) a single market and production base, (b) a highly competitive economic region, (c) a region of equitable economic development, and (d) a region fully integrated into the global economy. The AEC areas of cooperation include human resources development and capacity building; recognition of professional qualifications; closer consultation on macroeconomic and financial policies; trade financing measures; enhanced infrastructure and communications

connectivity; development of electronic transactions through e-ASEAN; integrating industries across the region to promote regional sourcing; and enhancing private sector involvement for the building of the AEC. In short, the AEC will transform ASEAN into a region with free movement of goods, services, investment, skilled labour, and freer flow of capital.

Commission on Higher Education 7 Dr. Josefino Ronquillo in his speech during the workshop sponsored by Cebu Chamber of Commerce and Industry at the University of San Carlos, said the integration in 2015 will open doors to foreign and local students who want to pursue studies within the region. More scholarships are also expected to be offered with the integration. Filipino and foreign teachers can also avail themselves of faculty exchange programs. To produce more competitive graduates, Technical Education and Skills Development Authority 7 Director Rosanna Urdaneta and University of San Carlos faculty Christine Maria Gohetia said there is a need for a “stronger industry-academe collaboration.” Tesda conducts assessment of its graduates and skilled workers to determine whether they can work based on “defined competency standards.” Certification is provided to those who meet these standards. She said that in Cebu, the industries are “more appreciative” of Tesda’s assessment and certification. Gohetia, on the other hand, emphasized the need for a stronger collaboration to decrease the country’s jobs mismatch. (2014, Feb. 19 Schools ‘need to address issues’ in time for economic integration. *Sunstar*. p.A15).

The ASEAN integration is an imitation of the Bologna Process. The same reason why Asean integration was created. Recall that with the Bologna Process implementation, higher education systems in European countries are to be organized in such a way that:

- a. it is easy to move from one country to the other (within the European Higher Education Area) – for the purpose of further study or employment;
- b. the attractiveness of European higher education has increased, so that many people from non-European countries also come to study and/or work in Europe;
- c. the European Higher Education Area provides Europe with a broad, high-quality advanced knowledge base, and ensures the further development of Europe as a stable, peaceful and tolerant community benefiting from a cutting-edge European Research Area; there will also be a greater convergence between the U.S. and Europe as European higher education adopts aspects of the American system. (http://en.wikipedia.org/wiki/Bologna_process).

The only way to measure the quality of education is through its outcome. The Policy-Standard to Enhance Quality Assurance (QA) in Philippine Higher Education Through an Outcomes-Based and Typology-Based QA states that the multiple missions for the Philippine higher education system is to produce thoughtful graduates imbued with 1) values reflective of a humanist orientation 2) analytical and problem solving skills; 3) the ability to think through the ethical and social implications of a given course of action; and, 4) the competency to learn continuously throughout life that will enable them to live meaningfully in a complex, rapidly changing and globalized world while engaging their community and the nation’s development issues and concerns; 5) To produce graduates with high levels of academic, thinking, behavioral, and technical skills/competencies that are aligned with national academic and industry standards and needs and international standards, when applicable; 6) To provide focused support to the research required for

technological innovation, economic growth and global competitiveness, on the one hand, and for crafting the country's strategic directions and policies, on the other; and 7) To help improve the quality of human life of Filipinos, respond effectively to changing societal needs and conditions; and provide solutions to problems at the local community, regional and national levels. Each HEI is also measured based on their institutional vision and mission statements. HEIs with similar institutional vision and mission statements may have similar and overlapping attributes and quality outcomes. However, HEIs may be differentiated functionally along 1) the qualifications and corresponding competencies of their graduates; 2) the nature of the degree programs offered; 3) the qualifications of faculty members; 4) the types of available learning resources and support structures available; and 5) the nature of linkages and community outreach activities.

Those aforementioned criteria are embedded in the instrument used in evaluating a higher institution which applies for the accreditation of their program offerings. As such, the best way to evaluate higher education institution is its level of accreditation.

Statement of the Problem

This study will determine the Higher Education Institution's (HEI's) on the following specific questions

1. What is the Internalization Strategy along the parameters of:
 - 1.1. Bilateral and Multilateral Agreements
 - 1.2. International Network
2. How is Philippine HEI's Autonomy in terms of:
 - 2.1 Curriculum Design
 - 2.2 Other Initiatives
3. What are the Policies on Foreign Students?
4. How is Quality Assurance functions in the ASEAN Integration?
5. What are the Best Practices and Gaps along the parameters of:
 - 5.1 competitiveness
 - 5.2 number of graduates,
 - 5.3 degree programs subscribed
6. What is the Emergent Theory on Philippine Higher Educational Institutions?

Significance of the Study

The ASEAN Economic Community Integration 2015 is now the current issue of Philippine higher education. However, its popularity is not without disadvantages. One of

these is that there are only few sources of information regarding this topic. This topic is not widely known but it has a tremendous effect in our lives. The effect would certainly be catastrophic to the country, in general, if the people are not well-informed. The application of this system affects the future of the graduates and the educational system. And in order that Philippine education will have the edge over other countries, it is important to know the entire concept of this Integration. This study helps to circumspect its adverse effect.

This would not just help the students who specialize in the social science department but to all students who will surely be affected by this integration. This paper would help professors in general who are interested in the issue of ASEAN Integration especially in terms of their professional career as more opportunities are opened as the ASEAN integration takes place. This paper would also help them to understand what Regional Integration is and what they can benefit from it. They may also use this knowledge to improve themselves. This is important so that the students will be guided on what are the courses that are in demand in the ASEAN members. By then, the students, as they graduate, have the greater chances of employability on the ASEAN region. This study would help businessmen prepare for the future need of the ASEAN region. This study guides them to foresee what will be the future demands of the market.

All **higher education institutions** will benefit from the findings in order to prepare for the new market of education. Colleges and universities will be guided on the courses to be offered.

The **policy makers** will be guided by these findings in crafting a better policy that would adapt to the new trend. The **administrators** will be guided on the new direction in the integration. Finally, in general, the **country** will benefit from the study because the findings will reveal basic information about the country-competitor in aspiring which among them will be the best gainer in the ASEAN Economic Community Integration.

Definition of Terms

Quality Assurance -- The means by which an institution can guarantee with confidence and certainty, that the standards and quality of its educational provision are being maintained and enhanced.

Philippine Qualifications Framework (PQF) -- It is a national policy that describes the levels of educational qualifications and sets the standards for qualification outcomes.

A quality assured national system for the development, recognition and award of qualifications based on standards of knowledge, skills and values acquired in different ways and methods by learners and workers of a certain country.

The ASEAN Qualifications Reference Framework (AQRf) -- is the process that results in the establishment of a relationship between the NQF and that of common reference framework. Include international experts and each country's referencing panel at least one internal representative (external to ASEAN and internal to ASEAN but not a representative of the referencing country or the observed country).

Regional Cooperation -- Regional cooperation involves work between large, and often separated, groups of people, especially those divided internationally. It involves working together with others, especially on the grandest scales. On a worldwide scale, the

United Nations is a great example of regional cooperation.

Integration -- Integration is defined as to put an end to the segregation of and bring into equal membership in society or in an organization.

Economic integration -- The process by which different countries agree to remove trade barriers between them. Trade barriers can be tariffs (taxes imposed on imports to a country), quotas (a limit to the amount of a product that can be imported) and border restrictions. For example, Canada, Mexico and the United States have formed the North American Free Trade Agreement (NAFTA), which reduces trade barriers between the three countries.

Political integration -- As the economies of the co-operating countries become completely integrated into a single market, there appears a need for common policies in social policy (education, health care, unemployment benefits and pensions) and common political institutions. This is political integration and its culmination occurs when the co-operating countries are so integrated that they share the same foreign policies and merge their armies. In effect, they form a new country.

The Bologna Process is a series of ministerial meetings and agreements between European countries designed to ensure comparability in the standards and quality of higher education qualifications. Through the Bologna Accords, the process has created the [European Higher Education Area](#), in particular under the [Lisbon Recognition Convention](#). It is named after the place it was proposed, the [University of Bologna](#), with the signing of the [Bologna declaration](#) by Education Ministers from 29 European countries in 1999, forming a part of [European integration](#). (Bologna Process. 2014, May 25, http://en.wikipedia.org/wiki/Bologna_process).

Profile

Population--is the number of inhabitants of the country who is a member of the ASEAN.

Land area—is the total land mass of the country including its territorial sea.

Income (per capita GNP)—is equal to the annual income of the country divided by the number of inhabitants or population. United States dollar should be used for uniformity.

Preparedness

Degree program – refers to courses to be taken prior to the giving of an award conferred by a college or university signifying that the recipient has satisfactorily completed a course of study.

Employability index refers to the data showing the number of those who are employed, underemployed, and unemployed?

Employed are those whose jobs match or seemingly in line with the academic degree taken.

Underemployed is when the job does not match with the academic degree taken.

Unemployed are those who earned academic degree but not employed.

Curriculum is the total learning experience provided by a school. It includes the

content of courses (the syllabus), the methods employed (strategies), and other aspects, like norms and values, which relate to the way the school is organized.

Program offerings are disciplines of study such as education, arts and sciences, nursing, and etc.

Employability refers to a person's capability for gaining and maintaining employment.

Higher Education program initiatives focuses on policies that improve access and success, affordability, innovation, and quality in higher education.

CHAPTER 2

REVIEW OF RELATED LITERATURE AND RELATED STUDIES

Related Literature

Prior to ASEAN Economic Integration there are already two agreements of countries to standardize education. The Bologna Process and the Washington Accord attempt to unify education. Both agreements meet without criticisms. Different authors view this in a various ways. Others say integration brings more benefits to the country rather than disadvantages; while others say otherwise. Callaghan (1987) commented on ASEAN Integration in saying that a massive increase of trading lines can surely affect the economy of the country. This massive change will kick-off at the start of the Economic Integration. On the other hand, Widdecombe (1965), already predicts that the export trades will rise above its limits, but domestic trades will be hard work in the future. Thus, integration is a competition among member-country taking into account the surplus and shortage of the country. The excess of one country may be need in the member country which falls short.

Washington Accord attempts to unify engineers while Bologna Process standardize education in Europe. Neighbouring countries imitate this practice to mitigate shortage of professionals in the country. There were already attempts to achieve regional integration outside of Europe which includes: Association of South East Asian Nations (ASEAN), African Union (AU), Gulf Cooperation Council (GCC), and Mercosur in South America, but they all failed to achieve resembling the progress of the EU. However, of all those who failed, ASEAN is the most advanced because they send delegations to Brussels to seek ideas from the EU experience. Indeed, no other grouping has even gotten to first base in terms of the basic requirements of integration, namely dealing with historical reconciliation and developing the necessary political will. There have been innumerable declarations from groupings in Asia, Africa, the Middle East, and South and Central America about the desirability of closer cooperation and even integration, but none was fully materialized. Perhaps, from all attempts, if ASEAN integration will be successful, this will be the first regional group in the Asia. Nonetheless, regardless whether it won't be successful, such that one country will unilaterally withdraw for reasons that are only advantageous to others; or that integration is only use to expand the market of the one who offer, still the effect is advancement of education. And whether the effect to economy would be favorable only to few, still it is undeniable that integration would bring advancement in all aspect particularly science and technology. Finally, the sharing of best practices of the ASEAN

members will bring about new horizon of comparing and copying practices that would develop the country.

Economic Integration may have the same impact to Washington Accord as reported in *Impact of the Washington Accord on Mobility of Engineers Through Standards*. According to Hu Hanrahan, chairman of the Washington Accord, there are two components of global engineering graduates: 1) universally and necessary attributes for all graduates, 2) the graduates' ability to contextualize key attributes in transnational and local context. Similarly, the Asean Economic Community will compete doctors, dentists, nurses, engineers, architects, accountants, surveyors and tourism workers.

Although Washington Accord focuses on the engineering graduates to become globally competitive, still ASEAN economic integration cannot be separated totally from this, since ASEAN integration only expounds the number courses. The ASEAN integration does not limit only to engineering graduates but includes other courses. ASEAN members will now be connected to each other. Further, this connectivity will assist ASEAN to achieve competitive growth; facilitate economies of accumulation and integrated production networks; enhance intra-regional trade; attract investments; promote deeper ties among ASEAN people and foster shared cultural and historical bonds.

Corollary, ASEAN is not much different from WTO (World Trade Organization) which imposes the GATT (General Agreement on Tariffs and Trade) and the GATS (General Agreement on Trade in Services). WTO intends to supervise and liberalize international trade. GATT regulates trade between participating countries; it provides a framework for negotiating and formalizing trade agreements, and a dispute resolution process aimed at enforcing participant's adherence to WTO agreements. The General Agreement on Trade in Services (GATS) is a treaty of the World Trade Organization (WTO) that entered into force in January 1995 as a result of the Uruguay Round negotiations. The treaty was created to extend the multilateral trading system to service sector. Looking at it a whole, ASEAN economic community and the integration is itself the WTO and the GATT-GATS respectively.

Criticisms from WTO, particularly the GATT-GATS cannot be set aside for they can be applied to ASEAN economic integration later on. The countries where goods are transported, would be less creative is a negative criticism over integration. The inflow of the imported products shutters ingenuity and creativity. People become less creative when things needed are already available in the market.

Related Studies

In an article "How should the UK's transnational education be quality assured in future?", UK universities and colleges, students, and government bodies in a consultation earlier this year, the Quality Assurance Agency for Higher Education (QAA) has today published the findings: a) 69 per cent of respondents agreed that the quality assurance of UK transnational education (TNE) needs to be strengthened, b) there were requests for QAA to give more guidance to UK providers of TNE (<http://www.qaa.ac.uk/Newsroom/PressReleases/Pages/How-should-the-UKs-transnational-education-be-quality-assured-in-future.aspx>).

In United Kingdom the Quality Assurance Agency for Higher Education (QAA) is an independent agency which established to safeguard standards and improve the quality of UK higher education. Its work is to check that standards meet or exceed minimum

expectations. QAA looks at the quality of the learning experience, and encourages higher education providers to improve this. Its reports contain recommendations and cite examples of good practice. Both sets of data are included in searchable databases on the Agency's website. QAA also publishes analysis of the collective findings of its reports to identify emergent trends, gathers information on particular themes of relevance to the higher education community, and maintains a database of empirical research about higher education. QAA conducts or sponsors research projects and consultation events relating to quality in UK higher education and publishes guidance on topical issues (http://en.wikipedia.org/wiki/Quality_Assurance_Agency_for_Higher_Education#Work_to_improve_quality_in_higher_education). This may be the guide for the new aspirant to any regionalization including the newly formed Integration among Asean members.

Two principles included in Quality Assurance are: "Fit for purpose", the product should be suitable for the intended purpose; and "Right first time", mistakes should be eliminated. QA includes management of the quality of raw materials, assemblies, products and components, services related to production, and management, production and inspection processes. Indeed the integration will compete the quality of the products among members thereby fortify the quality of the products.

Angela Yung-Chi Hou (2012), in an article "Mutual recognition of quality assurance decisions on higher education institutions in three regions: a lesson for Asia" cross-border higher education resulting in the increased mobility of students, academic staff, programs, institutions and professionals has grown considerably in global times. The question on how to ensure that the quality of academic programs has met the local and international standards simultaneously has become a great challenge in many nations. In recent years, the need for close cooperation of quality assurance agencies and acceptance of review decisions called "Mutual recognition" has been promoted by several international quality assurance networks of higher education. Established in 2003, the European Consortium for Accreditation in higher education (ECA), which aims to achieve mutual recognition of accreditation decisions among member countries, is the first such initiative in the world. Thus, this is a need to create a body that will recognize the quality of the products and this must be represented by the member state. Finally, each state must seek a seat in the accreditation to favour their own state; otherwise, the product may not be recognized.

Another group that sets standards is the Higher Education and Training Awards Council (HETAC) was established on 11 June 2001, under the Qualifications (Education and Training) Act 1999. It is the successor to the National Council for Educational Awards (NCEA) and is the qualification awarding body for third-level education and training institutions outside the university sector. It exists to benefit learners and potential learners by: a) setting standards, accrediting programmes and awarding qualifications at all levels of higher education and training; b) providing assurance to the public that programmes of higher education and training are above an acceptable threshold level of quality and that objective quality assurance processes are in place to meet the expectations of Irish Society and the International Community; and c) delivering a quality improvement service to registered educational providers so as to contribute to raising standards to increasingly higher levels. HETAC's principal quality assurance processes include registering providers of higher education and training, validating programmes, monitoring quality, reviewing institutions and conducting related system-level research.

The Review of Academic Programme Validation of certain Complementary Therapies, (5 September 2012) reveals that there an identification of all academically accredited/validated programmes of higher education provided by higher education institutions (HEIs) in Ireland. There is a comparable HEIs in countries that have established national frameworks verified as compatible with the Bologna qualifications framework. There are academically accredited/validated programmes of higher education in the same jurisdictions, where, since 2005 validation has been withdrawn or refused or where validated provision has ceased over the last five years. The analysis of the reasons for this, is driven by academic, market, political, reputational or scientific concerns. This suggests a criterion for the identification of fields which have the academic and professional maturity to warrant the academic validation of programmes by HETAC.

Priority Sectors in the Asean economic integration

Senen Perlada, director of the Export Marketing Bureau of the Department of Trade and Industry, said that the priority sectors are: agro-based products, automotives, electronics, fisheries, rubber-based products, textiles and wood-based products for goods, and air transport, eAsean, healthcare, logistics and tourism services. (2014, April 3. 11 Sectors Prioritized in Asean Economic Integration. *Sunstar*, p.A16). In line with Integration, Honeyman added further that Global competitiveness substantially means able to compete in terms of: numeracy of mathematics, science, language, and information technology. This should be the cornerstone of the Philippine education policy. (Honeyman, Neil. 2014, March 12, Globally competitive education. *Sunstar*, p.A14). In addition, the chairman of Commission on Higher Education, Patricia Licuanan list the Priority **Courses for Academic Year 2014-2015 to Academic Year 2017-2018**. The data shows that the stakeholders view engineering and agriculture as in-demand in the industry for the next five years. Although there is still high unemployment in the Philippines, these identified courses are important in the future. Besides, this list would balance and distribute proportionally the graduates thereby producing knowledgeable graduates of the different fields. Right now there is great disproportion to the demand and supply of laborers which eventually causes the unemployment and underemployment. With no strict measures to combat this problem would eventually worsen the economy during the ASEAN economic integration.

ASEAN community integration and the Bologna Declaration

The difference between ASEAN community integration and the Bologna Declaration is that, the latter was signed in 1999 by 29 European countries; whereas the former is just a newly formed trade agreement that will encourage free flow of goods and services among 10 countries of the ASEAN. European countries are mostly landlocked countries while ASEAN are more archipelagic. This can be considered a hindrance to the fast implementation of the regional integration.

By experience, European countries finds it difficult to harmonize the said agreement because in some countries, for example Norway, one ECTS (European Credit Transfer and Accumulation System) framework by the European Commission point, is defined as 20 hours study, while in The Netherlands, it is defined as 28 hours. These readily available definitions essentially prove that the "ECTS point" is not standard at all (http://en.wikipedia.org/wiki/Bologna_process). Not all countries in fact complies the Bologna Declaration. Bulgaria has not fully complied with the rules of the Bologna Process. Universities do not currently recognize bachelor's diplomas from other countries, and one

must often take an English language exam prior to or at the time of enrollment at a Bulgarian university, even if English had previously been that person's primary language of academic instruction. An example of this is the New Bulgarian University, which requires that applicants have an English certificate from Cambridge or pass the university's own English language exam. The European Union has imposed sanctions on Bulgaria for such cases.

There are in fact, doubts as to how should ASEAN community able to maintain if ever the implementation will be in its full force. In the past, other regional groups which tried this system of standardizing countries already failed. Nonetheless, regardless of whatever it may result, still it is undeniable that there will be progress but it is uncertain of who will be among the 10 countries competing will benefit more.

ASEAN Economic Community (AEC)

Asia Opportunities: Asean Economic Community (AEC) in 2015



Under the Asean Economic Community (AEC), a single regional common market of Asean countries will be created by 2015. The regional integration's objective is to create a competitive market of over 600 million people in Asean countries: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. There will be free flow of goods, services, investment capital and skilled labor following the liberalization. These will include tariff reductions and streamlining of certain administrative procedures. Many businesses have begun preparing themselves three years ahead of time to meet the challenges and opportunities of the Asean Economic Community (AEC)(http://www.business-in-asia.com/asia/asean_economic_community.html).

ASEAN as a small WTO will be disadvantageous, at the start, to the third world countries. Basically, this integration benefits those countries having high surplus. Thus, integration would mean an additional market for their goods. Things being equal, this would encourage other countries to be more competitive. With good laws and foresight can turn shape the economy more advantageous and competitive. Integration is simply an

opening our market for export and import. Those who are good in export will dominate the market.

PQF (Philippine Quality Framework) and AQRF (ASEAN Qualifications Reference Framework)

AQRF is the process that results in the establishment of a relationship between the NQF and that of common reference framework. Include international experts and each country's referencing panel at least one internal representative (external to ASEAN and internal to ASEAN but not a representative of the referencing country or the observed country). The importances of the AQRF are the following: a) support recognition of qualifications, b) facilitate lifelong learning, c) promote and encourage credit transfer and learner mobility, and d) will support and enhance NQFs qualifications system while providing a mechanism to facilitate comparison and transparency.

The deadline of AQRF for the member countries to finalize the referencing process is the end of 2018. All new qualification certificates and related documents issued by the relevant authorities will contain a clear reference by way of NQFs to the appropriate AQRF level. The PQF significant changes in the education system are: a) the identification of qualifications, competency standards, b) the benchmarking of standards and international alignment of qualifications, c) the improvement of quality assurance mechanisms, d) the shift to outcomes-based education and the use of learning outcomes, e) the cooperation and collaboration among the regulatory bodies, the education/training providers, the industry, the professions and representatives of workers and students.

In the department of education, its over-all goal of the enhanced basic education program (K-12 Curriculum) is the holistically developed with 21st century skills having the four core skills: a) effective communication skills, b) information, media and technology skills, c) learning and innovation skills, and d) life and career skills. With the skills acquired, the result will be: a) higher education, b) middle level skills development, c) entrepreneurship, and d) employment.

The quality assurance should align with the domains of PQF based on international standards/best practices. There should be a review and finalize the Learners' Assessment framework and contents of the assessments. The quality assurance should have the development of a qualification register. Review and refine guidelines in establishment, recognition, accreditation, monitoring, evaluation system of schools and training providers. Prepare guidelines of establishment of senior high school that is among others labor-market driven. Finally, quality assurance should review monitoring and evaluation system of curriculum implementation to ensure performance-based teaching-learning process.

In line with the Internationalization Strategy along the parameters of Bilateral and Multilateral Agreements, the Philippine Commission on Higher Education (CHED) and New Zealand Qualifications Authority (NZQA) held during the ASEAN Summit bilateral meetings at the Philippine International Convention Center on 14 November 2017. The Memorandum of Cooperation includes, but is not limited to, the following areas:

- a. exchange information about the New Zealand and Philippine education and qualification systems, including the roles and responsibilities of NZQA and CHED, academic programme approval and quality assurance;

b. encourage technical cooperation that will be of mutual benefit to the Participants;
c. compare the levels of the Philippine National Qualifications Framework (PNQF) and the New Zealand Qualifications Framework (NZQF) beginning with a pilot project on the bachelor's degree level; and

d. exchange information as appropriate to support our mutual interest in international student welfare and safety.

This initiatives helped the graduates at par with the neighbouring countries.

CHAPTER 3

RESEARCH METHODOLOGY

Research Method

The study utilizes a combination of descriptive survey and data analysis method of research. A descriptive survey was used to describe and interpret the data gathered to answer the problems. Data will be generated from the internet; such that there will be no questionnaires to be distributed. The main source of the information is the data from the website of the agencies of the ASEAN members. It is so because the nature of the study requires that information should be retrieved through the website of the concerned agencies. As to problem number 4 of this study, the information are by the level of accreditation since instruments of the accreditation determines some aspects of preparedness of the higher institutions.

Research Subjects and Respondents

The subjects of the research are the ASEAN which is composed of ten members, namely: Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Laos, Myanmar, Vietnam, and Cambodia. The study focuses particularly the respective agencies or department of the countries involved which data are necessary to the study. Specifically, the researcher would look into the agency or department of countries in-charged in keeping the profile or information of the country. In the Philippines, the vital source of information important in this study is the NSO (National Statistics Office). Other agencies or departments may also be useful for other source of information. When information is not available by the subject country, or when the information is withheld by the subject country, third country which possesses the information may also be utilized. In the absence or when information which is important in this study cannot be availed by those processes aforementioned, interview with foreign delegates representing the country may be utilized.

Research Environment

This research utilizes the use of the internet to data mine information that can be retrieved in other countries. The researcher would look into the different agencies of the members of the ASEAN Nations and retrieve necessary information relevant to the study. ASEAN members are Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Laos, Myanmar, Vietnam, and Cambodia. This study will be conducted in the Philippines albeit its subjects are outside it. The reason behind this is the fact that it would be practical to access the information outside the country through the utilization of the internet. Besides, the

information in the internet is similar and would render the same result and reliability than actually going to all countries which are members of the ASEAN.

Amidst South China Sea, Malaysia is strategically sited in the Southeastern Asia. This beautiful country, with an area of 329,750 km², has two separate parts - Peninsular Malaysia and East Malaysia. As the name suggests, East Malaysia is to be found in the East, whereas Peninsular Malaysia is located in the West. The southernmost tip of continental Asia is marked by Tanjung Piai, a cape positioned in the state of Johor. Placed between Sumatra and Peninsular Malaysia, the Strait of Malacca is possibly the leading shipping lane on the planet.

Indonesia is located between the Indian Ocean and the Pacific Ocean. There are around 13,000 islands in Indonesia. Indonesian Islands experiences a hot and humid climate throughout the year. These islands are located along the equator between Asia and Australia. Due to its location, the weather is tropical in Indonesia. (<http://www.indonesiapoint.com/location-of-indonesia.html>).

The Thailand geography comprises of varied and attractive landscape features. Thailand is a Southeast Asian country. This country is precisely located on the southeastern part of Burma, sharing its borders with the Andaman Sea and the Gulf of Thailand. The total area of Thailand occupies an area of 514,000 square kilometers. Out of this the total land area covers 511,770 square kilometers and the water covered area is 2230 square kilometers. The geography of Thailand attracts many tourists from different parts of the world. (<http://www.mapsofworld.com/thailand/geography/>).

The [Philippines](#) is an [archipelago](#) that consist 7,107 islands with a total land area of 300,000 square kilometers (115,831 sq mi). The 11 largest islands contain 94% of the total land area. The largest of these islands is [Luzon](#) at about 105,000 square kilometers (40,541 sq mi). The next largest island is [Mindanao](#) at about 95,000 square kilometers (36,680 sq mi). The archipelago is around 800 kilometers (500 mi) from the [Asian](#) mainland and is located between [Taiwan](#) and [Borneo](#). (<http://en.wikipedia.org/wiki/Philippines/Geography>). The Republic of Singapore consists of the main island of Singapore, off the southern tip of the Malay Peninsula between the South China Sea and the Indian Ocean, and 58 nearby islands. (<http://www.infoplease.com/country/singapore.html>).

Brunei is a sovereign state located on the north coast of the island of Borneo, in Southeast Asia. It is completely surrounded by the state of Sarawak, and Malaysia. Brunei is the only sovereign state completely on the island of Borneo. Laos is a small landlocked country in Southeast Asia bordering on Thailand, Myanmar (Burma), China, Vietnam, and Cambodia. Laos has an area of about 91,400 square miles (236,800 square kilometers), roughly the size of Idaho. It runs about 700 miles (1,126 kilometers) from north to south and averages about 150 to 200 miles (240 to 320 kilometers) across. The country is extremely mountainous, with only about 4 percent of the land suitable for farming. (Location. 2014, May 28. Retrieved from <http://www.traveltoaos.com/travel-guide/location.html>). Myanmar (Burma) is a [sovereign state](#) in [Southeast Asia](#) bordered by [Bangladesh](#), [India](#), [China](#), [Laos](#), and [Thailand](#). One third of Burma's total perimeter of 1,930 kilometres (1,200 miles) forms an uninterrupted coastline along the [Bay of Bengal](#) and the [Andaman Sea](#). (<http://en.wikipedia.org/wiki/Burma>). Vietnam is bordered on the north by China and to the west by Laos and Cambodia. To the east is the South China Sea (called

"Eastern Sea" by the Vietnamese). The country's shape and size is often compared to a bamboo pole with loads at the end (north and south). In the central part of the country Vietnam is only 40 kilometers (25 miles) across. The total land area of Vietnam is 329,569 square kilometers (127,247 square miles). (<http://www.nationsencyclopedia.com/economies/Asia-and-the-Pacific/Vietnam.html>). Cambodia is a country located in the southern portion of the [Indochina](#) Peninsula in [Southeast Asia](#). Its total landmass is 181,035 square kilometres (69,898 sq mi), bordered by [Thailand](#) to the northwest, [Laos](#) to the northeast, [Vietnam](#) to the east, and the [Gulf of Thailand](#) to the southwest. With a population of over 14.8 million, Cambodia is the [70th most populous country](#) in the world. (<http://en.wikipedia.org/wiki/Cambodia>).

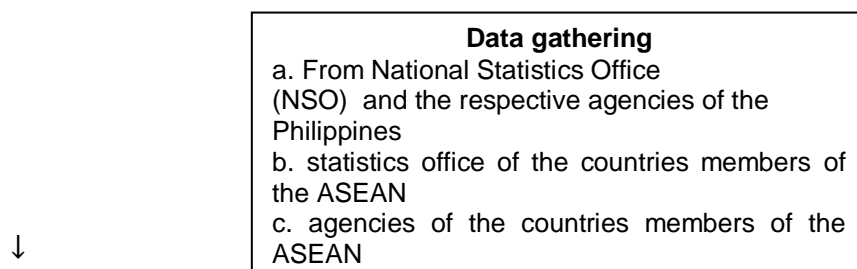
Research Instrument

The study uses the information from the different agencies on the identified parameters to determine preparedness of the Philippines in the ASEAN economic integration, namely: PQF and AQR, curriculum, program offerings, employability, and Higher Education program initiatives. The comparison of the different countries will be the basis of the preparation in the integration. The most accurate to qualify preparedness as identified in the parameters is the level of accreditation of the school. The classification of the higher educational institution in the Philippines will be compared and ranked.

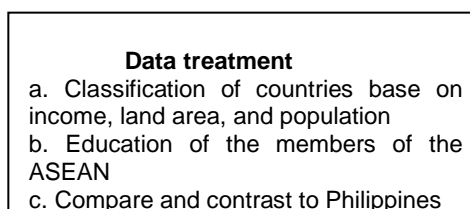
The comparison of the profile of the country is also important to validate the hypotheses of the study. From the data it can be seen the status of the Philippines as compared to other ASEAN members.

Data Gathering Procedure

After the approval of the Research Design, the researcher will look into the possible and reliable source of information in the country subject of the study. Extracts information from the ten countries of the ASEAN to come up with a data set and transforms it into graphical representation to make it understandable. Aside from the graphs which clearly show the difference among member-states, a table which also shows the comparison in all aspects vital to Integration 2015 is also shown. From there, the next step to be done is to generate conclusion. The above process is in line with database and [data management](#), [data pre-processing](#), and [inference](#) considerations.



↓



Statistical Treatment of Data

Data will be treated in this study. The results were tallied and tabulated. The researcher uses data mining techniques through the use of MINITAB to compare and contrast the count employability brought about by various variables to see the difference between and among the variables.

Evaluation/Conclusion
a. Ranking based on the existing results
b. Projection/forecast

Regression is also used as a statistical process for estimating the relationships among variables. Regression analysis is used in this study to [predict](#) and [forecast](#) the future of the Philippine economy when the economic integration is now on its full swing. Members of the ASEAN countries and the variables to determine preparedness will be tabulated and tallied. Basic information or profile of the countries subject of the study is necessary as dependent variables.

Statement of Hypotheses

Along this study the following may be proved or disproved:

1. ASEAN Economic Integration is disadvantageous to Philippine graduates.
2. Economic integration would only increase the unemployment rate.
3. Philippines is not prepared for the Asean Economic Community Integration 2015.

CHAPTER 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter includes the presentation, analysis and interpretation of data gathered by the researchers from the secondary data used. This chapter also contains the presentation of data in tabular and figure form along with its interpretation.

A. RESPONDENT PROFILES AND THEIR EDUCATION SYSTEM

BRUNEI DARUSSALAM

Brunei Darussalam is the smallest ASEAN member state with a population of over 400,000. Its per capita GDP in 2011 was US\$38,703, making it the second highest for any of the ASEAN member states. Brunei was considered by World Bank as 'high income'. With a

view of securing the nation's future in global economy, Brunei Darussalam is now investing strongly in its education system. (ASEAN State Education Report, 2014)

The Education System of Brunei Darussalam has a 6-5-2 structure, that is, six years of primary, five years of secondary and two years of pre-university studies. Under the Compulsory Education Act of 2011, all children aged 6 to 15 years old must be educated of at least 9 years.

With the data retrieved from ASEAN State of Education Report 2013, Table 2 shows the Net enrolment rate and Table 3 shows the Survival Rate in Brunei Darussalam.

	2009	2010	2011
Primary Education	97.5	97.36	97.58
Secondary Education	89.88	90.11	91.19
Tertiary Education	17.83	16.84	20.15

SOURCE: ASEAN State Education Report 2013

Table 2. Net Enrolment Rate in Percentage in Brunei

	2009	2010	2011
Primary Education	98	99	100
Secondary	75	92	95
University Qualifications	11	11	11

SOURCE: ASEAN State Education Report 2013

Table 3. Survival Rates in Percentage in Brunei

It can be seen in the two data that the Enrolment Rate in Brunei Darussalam is increasing every year which means the students enrolling is increasing every year. With regards to the Survival Rate, it can be observe that in the Secondary level, it has a big jump from 2009 with 75% to 92% in 2010. This can only mean that students graduating from the Secondary level are increasing.

However, when it comes to curriculum preferences, the Table 4 shows that males prefer Technical-Vocational route rather than the Higher Education. Higher Education refers to Colleges of Higher Education and Universities.

YEAR	HIGHER	EDUCATIO	TECHNICA	VOCATION
	MALE	FEMALE	MALE	FEMALE
2006	1687	3138	1678	782

2007	1815	3177	1754	1131
2008	1790	3227	1796	1202

SOURCE: Ministry on Education (2008)

Table 4. Gender Distribution in Technical-Vocational and Technical Education in Brunei

CAMBODIA

Cambodia is considered as one of the least developed ASEAN member state. It has a population of around 16,000,000. Its GDP per capita was only US\$879 in 2011 despite the impressive economic rates since mid-1990s. It is a youthful nation with almost one-third of its population aged 0-14 years old. (ASEAN State Education Report, 2014)

The Education System of Cambodia has a 6-3-3 pattern which consists of six years of primary, three years of lower secondary and three years of upper secondary studies. It is a must that children aged 6 to 15 attend school. About 3.1 million children were enrolled in primary schools, of who the majority are from rural areas.

The Ministry of Education, Youth and Sport along with stakeholders in the community established a community learning center in TbongKhmum village, Kong Pisey district, KongpongSpeu province on June 1, 2011. This is an example of sustainable operation. The community helped with repairing and furnishing additional equipment for study in occupational skills such as tailoring, traditional music and wedding planning.

Table 5 shows the Outcome of Life Skills Education in Community Learning Centers or CCL for Youth.

Pr actice Year	N umber of CLC	N umber of Skill Classes	o. of	Te	St	En	St	Com
				achers	udents	rolled	udents	pleted
			otal	Fe male	To tal	Fe male	To tal	Fem ale
2006	57	120	20	79	2,155	1,438	849	572
2007	85	176	76	73	3,884	1,783	N.A.	N.A.
2008	141	183	188	128	4,770	1,772	3,875	1,522
2009	154	270	270	126	4,397	2,479	4,038	2,285
2010	240	334	228	178	8,982	4,903	7,357	3,366
2011	298	608	592	242	10,466	5,591	9,122	4,819
2012	336	666	666	296	10,666	6,666	7,566	4,886

012	21	53	01	9	507	310	37	1
2	3	6	30	10,	6,	7,6	4,81	
013	48	31	49	1	661	217	49	1

SOURCE: NFE-MIS, MoEYS

Table 5. Outcome of Life Skills Education in Community Learning Centers (CCLs) for Youth in Cambodia

It can be seen in the data, the number of female enrolled in the community learning centers increased from 1,438 in 2006 to 6,217 in 2013. The reason behind this increase is because of the skills offered were appealing to the females and responded to the labour market demands.

In Table 6, it show the number of students enrolled in Higher Education over time. It can be seen that the female students enrolled have increased which means that more female students have access in Higher Education.

Bachelor	Public	Students Institutions	in	Bachelor in	Private	Students Institutions
	Total	Female	%Female	Total	Female	%Female
2000-01	26,361	5,538	21.00	5,579	1,313	23.53
2001-02	23,340	7,071	30.29	8,400	2,080	24.76
2002-03	23,481	7,288	31.03	17,828	5,178	29.04
2003-04	25,201	8,335	33.07	19,654	5,751	29.26
2004-05	22,433	7,725	34.43	25,098	7,515	29.94
2005-06	31,241	10,883	34.83	43,622	13,748	31.51
2006-07	38,373	13,714	35.73	53,967	18,776	34.79
2007-08	46,375	16,900	36.44	63,695	23,304	36.58
2008-09	55,576	21,381	38.47	81,677	31,426	38.47
2009-10	67,183	26,201	38.99	94,333	37,461	39.71

-11	2010	80,6	31,60	39.2	105,	42,2	40.09
	06		9	1	312	16	
-12	2011	90,1	36,71	40.7	117,	46,7	39.79
	71		1	1	495	52	
-13	2012	96,4	37,44	38.8	119,	48,7	40.79
	60		4	1	593	91	

SOURCE: EMIS, MoEYS

Table 6. Bachelor Degree in Higher Education in Cambodia

INDONESIA

An archipelago of over 17,000 islands, Indonesia has a population of over 250,000,000. Being an archipelago, it is a challenge for Indonesia in delivering a well-integrated education system. Its level of GDP per capita was US\$3,563 in 2011, and the World Bank classifies Indonesia as 'middle-income'.

In Indonesia, the Education System structure follows the pattern of 6-3-3, that is, six years of primary, three years of lower secondary and three years of upper secondary studies. Indonesia's school system is considered as the fourth largest in the world. It has over 50 million students with about three million teachers and more than 300,000 schools.

The Table 7 contains the Total Enrolment and Gross Enrolment Rate (GER) in Indonesia for the year 2009 to 2010 and 2012 to 2013.

	2009-2010	2012-2013
Public	1,636,122	1,649,267
Private	2,451,451	3,645,869
MORA	503,439	653,846
State	66,535	103,072
Total	4,657,547	6,052,054

SOURCE: GER and NER of ECE, Primary, Secondary and Higher Education 2009/2010 and 2012/2013, MOEC

Table 7. Total Enrolment and Gross Enrolment Rate (GER) in Indonesia

It can be seen that the number of students enrolled in Indonesia is impressively increasing. In Table 8, it shows the Survival Rates of students in the three level of education.

	2009	2010	2011
Primary	94.16	89.36	95.3
Lower Secondary	99.26	96.72	97.68
Upper Secondary	95.90	96.79	96.58

SOURCE: ASEAN State of Education Report 2013

Table 8. Survival Rates in Percentage of Indonesia

LAOS

Lao People's Democratic (Lao PDR) was classified by World Bank as 'lower middle income' with its GDP per capita level of \$1,279 in 2011. Lao PDR has a total population of almost 7,000,000. Laos has at least 49 different ethnic nationalities and some communities were remote, thus, challenging the government in delivering of education, following a curriculum that is relevant to the whole country.

In Laos, their Education System follows the 5-4-3 pattern which consists of five years of primary, four years of lower secondary and three years of upper secondary studies. Primary School for children is compulsory.

In Table 9, the Gross Enrolment Rate of Lao PDR is shown while Table 10 shows the Survival Rate.

	2008/2	2009/2	2010/2	2011/2	2012/2
	009	010	011	012	013
Primary Education	91.6	92.7	94.1	95.2	96.8
Lower Secondary	62.7	60.2	62.9	64.7	69
Upper Secondary	36.8	33.9	33.4	34.7	37
Tertiary Education	16.45	16.62	17.67	----	----

SOURCE: ASEAN State of Education Report 2013

Table 9. Gross Enrolment Rate in Percentage in Laos

	2008/2	2009/2	2010/2	2011/2	2012/2
	009	010	011	012	013
Primary Education	68.4	71.1	68.0	70	73.3
Lower Secondary	75	69	---	---	---
University Qualification	3	5	7	---	---

SOURCE: ASEAN State of Education Report 2013

Table 10. Survival Rates in Percentage in Laos

As it is shown, it can be observed that the students enrolling in all levels are increasing, although small number of students enrolled in the tertiary level. When it comes

to the survival rate, it can be seen that there is a very small percentage in the University Qualification.

MALAYSIA

Malaysia has a total population of about 31,000,000. Its economy is rapidly expanding and its level of GDP per capita in 2011 is US\$9,941 which makes it a 'upper middle income' by World Bank.

The Education System of Malaysia has a pattern of 6-3-2. It consists of six years of primary schools, three years of lower secondary school and two years of upper secondary school.

Due to the commitment of the Government of Malaysia to education, Malaysia continues to expand the access to students to other levels of education, which in turn, a great majority of students now move on to secondary education with near universal lower secondary education. From 45 percent in the 1980's, the enrolment rate in the upper secondary education increases to 82 percent today. There are also an increasing number of students who pursues their post-secondary and tertiary education.

In Table 11, the number of enrolled students in different levels is shown while the Survival Rates of Students in Malaysia is shown in Table 12.

Level	Total
Preschool	200,684
Primary	2,685,403
Secondary	2,188,525
Overall Total	5,074,612

SOURCE: DATA APDM 31 MAY 2016

Table 11. Number of Students (Enrolled) in Malaysia

	2009	2010	2011	2012
Primary	98.80	97.17	98.70	99.06
Lower Secondary	98.37	96.20	96.27	96.28
Upper Secondary	96.32	96.70	96.58	97.05

SOURCE: ASEAN State of Education Report 2013

Table 12. Survival Rates in Percentage in Malaysia

MYANMAR

With a total population of over 54,000,000, Myanmar is considered as the second largest in Southeast Asia. Its GDP per capita is only US\$875 in 2011. It has 135 ethnic groups which is a distinct characteristic of Myanmar because of its ethnic diversity.

Myanmar follows the pattern 5-4-2 in their Education System, that is, five years of primary education, four years of lower secondary and two years of upper secondary. However, this structure is under review and to be replaced with a 5-4-3 structure.

Table 13 shows the Net Enrolment Rate in Myanmar and Table 14 contains the Survival Rate.

	2009	2010	2011	2012
Primary	83.94	84.13	84.61	84.60
Secondary	39.57	41.15	41.61	43.77

SOURCE: ASEAN State of Education Report 2013

Table 13. Net Enrolment Rate in Percentage in Myanmar

	2009	2010	2011	2012
University Qualification	73.7	78.35	80.64	79.96

SOURCE: ASEAN State of Education Report 2013

Table 14. Survival Rates in Percentage in Myanmar

It can be seen that the survival rate of students in the university qualification has a decent value and is increasing over time.

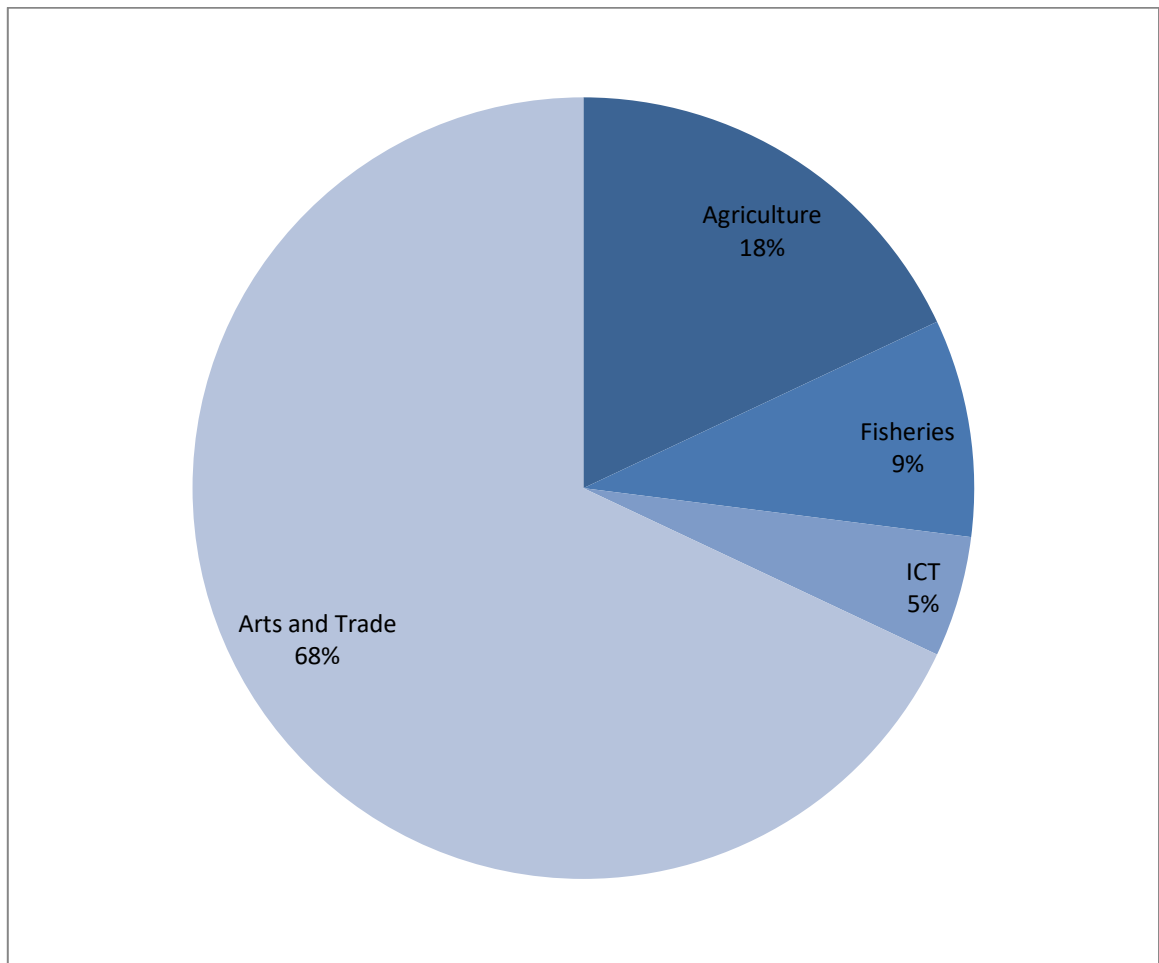
PHILIPPINES

The Philippines is an archipelago with over 7,000 islands. It has a total population of over 103,000,000. Its GDP per capita in 2011 was US\$2,341. It is a multi-linguistic country with thirteen common languages with Filipino as its national language.

Philippines' Education System has a pattern of 6-4-2, which recently switches from a ten-year curriculum to twelve-year curriculum. It consists of six years of elementary school, four years of junior high school and two years in senior high school.

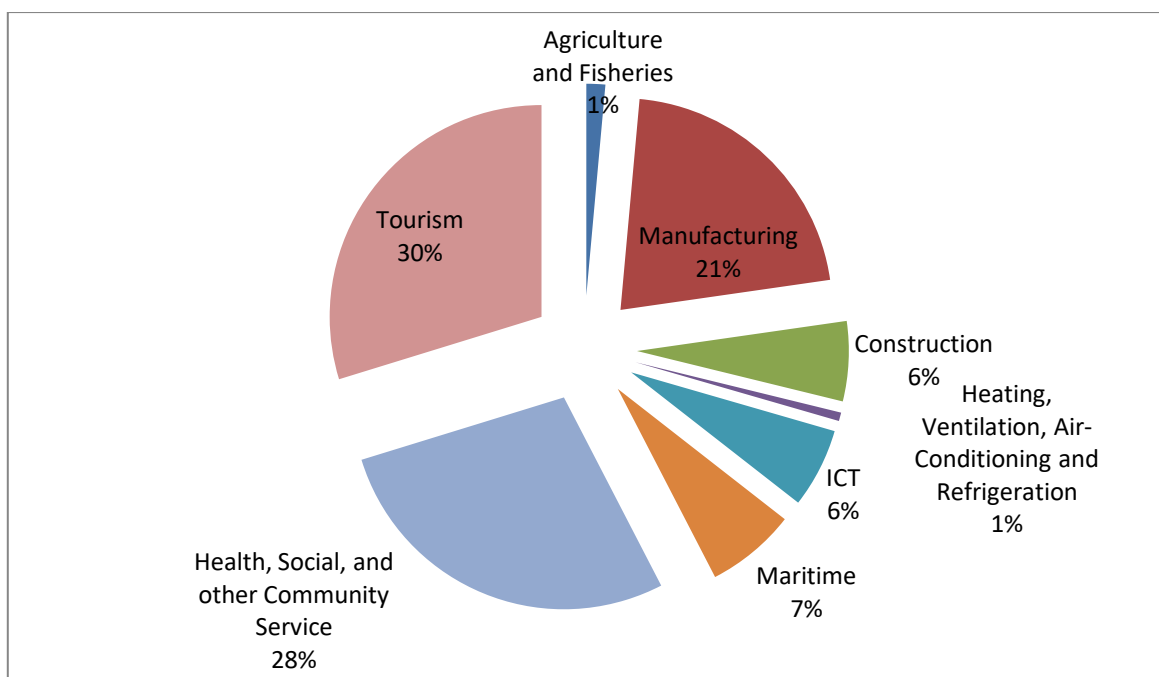
The education system of Philippines is also called K to 12. Under this curriculum, a tech-voc track will be offered at the junior and senior high school levels. Graduates from this program are expected to be equipped and are employable when they exit the Grade 10 and 12 through National Certification I and II.

Figure 2 shows the Students in every Tech-Voc-Subject in Public Schools in the School Year 2012-2013 while Figure 3 shows the Certified Skilled or Tech-Voc Workers by Sectors in the year 2012.



SOURCE: Research and Statistics Division, DepEd

Figure 2. Percentage of Students per Tech-Voc-Subject, Public Schools, SY 2012-2013



SOURCE: Research and Statistics Division, DepEd

Figure 3. Certified Skilled/Tech-Voc Workers by Sector, 2012

SINGAPORE

Singapore has a population of over 5,700,000 and has the highest GDP per capita level with US\$50,130 in 2011 of any ASEAN member states. It is a very competitive nation and was ranked as second out of 144 on its global competitiveness index by the World Economic Forum.

The Education System of Singapore follows the pattern of 6-4-2, that is, six years of primary, four years of secondary and two years of pre-university studies. They also engage in the delivery of degree programs offered by foreign universities.

Table 15 shows the Net Enrolment Rate and Table 16 shows the Survival Rates of Students in Singapore.

	2009	2010	2011	2012
Primary	96.8	100	100	100
Secondary	95.2	98.3	98.8	98.8
Post-secondary non-tertiary	74.6	73.5	78.5	87.5
Tertiary	63.6	71.0	72.0	81.3

SOURCE: ASEAN State of Education Report 2013

Table 15. Net Enrolment Rate in Percentage in Singapore

	2009	2010	2011	2012
Primary	99.9	99.9	99.9	100
Secondary	99.2	99.2	99.3	99.3

SOURCE: ASEAN State of Education Report 2013

Table 16. Survival Rates in Percentage in Singapore

It can be seen that Singapore has an impressive Net Enrolment rate in Primary level with a perfect score of 100 percent. The number of students is also increasing every year. The survival rates also reflect a positive image to Singapore.

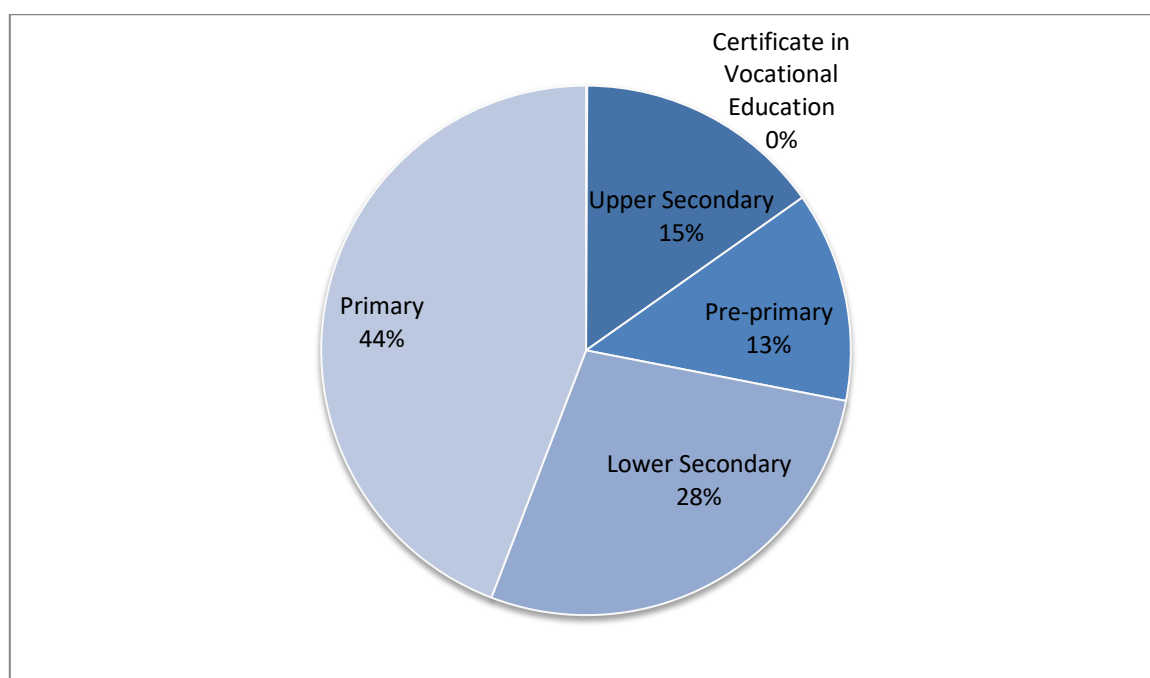
THAILAND

Thailand has a population of over 68,000,000 with a GDP per capita of US\$5,116 in 2011. It ranked 38th in the world in terms of global competitiveness and was considered by World Bank as 'upper middle income'. Its median age is 35.1 years which is older than other ASEAN member states.

In regards to their Education System, Thailand follows the pattern 6-3-3 which consists of six years of primary, three years of lower secondary and three years in upper secondary studies.

In Figure 4, the Enrolment of Students classified by level of Education in the year

2013 is shown.



SOURCE: Implementation Guidelines for Supporting Education acts from Kindergarten through the Basic Education Level in FY 2013

Figure 4. Students Enrolment Classified by Level of Education in 2013

From a report by the Basic Education Commission, it concludes that Thailand has successfully expanded the access of education to their citizens with an increase in the average number of years of education among those people who aged 16 to 69 to 8.3 in 2010 from 5.3 in the past years. The dropout rate also decreases.

Table 17 contains the number of students in Formal School System according to their Grade, Level and Type of Education in the Academic Year 2012.

Pre-primary	1,799,125
Primary	4,935,721
Lower Secondary	2,497,692
Upper Secondary	2,141,289
Under graduate degree and below	2,357,831
Graduate	199,437

SOURCE: 2012 Statistic in Brief, Office of the Permanent Secretary, Ministry of Education

Table 17. Number of Students in the Formal School System by Grade, Level and Type of Education: Academic Year 2012

VIETNAM

With a population of almost 650,000,000, Vietnam had a GDP per capita in 2011 of US\$1,403 and was classified by World Bank as a 'lower-middle-income'. With the combined

efforts of the education sector, the local authorities, and other institutions, the overall quality of education in Vietnam has increased since 2000.

With a 5-4-3 pattern in education system, students in Vietnam undergoes five years in primary, four years in lower secondary and two years in upper secondary studies. In higher education, about 16% of their students enrolled in private universities or college.

Table 18 shows the Net Enrolment Rate while Table 19 shows the Survival Rate of students in percentage in Vietnam.

	2009	2010	2011
Primary	98.5	98	99
Secondary	84.96	85.09	87.24
Tertiary	51.73	52.59	54.25

SOURCE: ASEAN State of Education Report 2013

Table 18. Net Enrolment Rate in Percentage in Vietnam

	2009	2010	2011
Primary	91.32	92.16	92.08
Lower Secondary	77.99	79.12	81.32
Upper Secondary	76.23	79.82	82.47

SOURCE: ASEAN State of Education Report 2013

Table 19. Survival Rate in Percentage in Vietnam

With the above information, it is showed that most of ASEAN member states has a 11-year curriculum or 12-year curriculum which is the reason for the Philippines to restructure their education system from 10-year curriculum to 12-year curriculum. Also, from the gathered secondary data, it can be seen that if all the students from each member states are combined, a big population of students would show how hard the competition from different ASEAN member states is when it comes to job-seeking.

B. EMPLOYMENT RATE OF ASEAN MEMBER STATES

In Table 20, Labour Force and Labour Productivity along with the Educational and Skills Development and Average Money Wage of the ten-member states are shown.

Labour Force	Education and Skills Development	Average Money Wage	Labour Productivity (constant 2005)
(00	—	ge	nt 2005

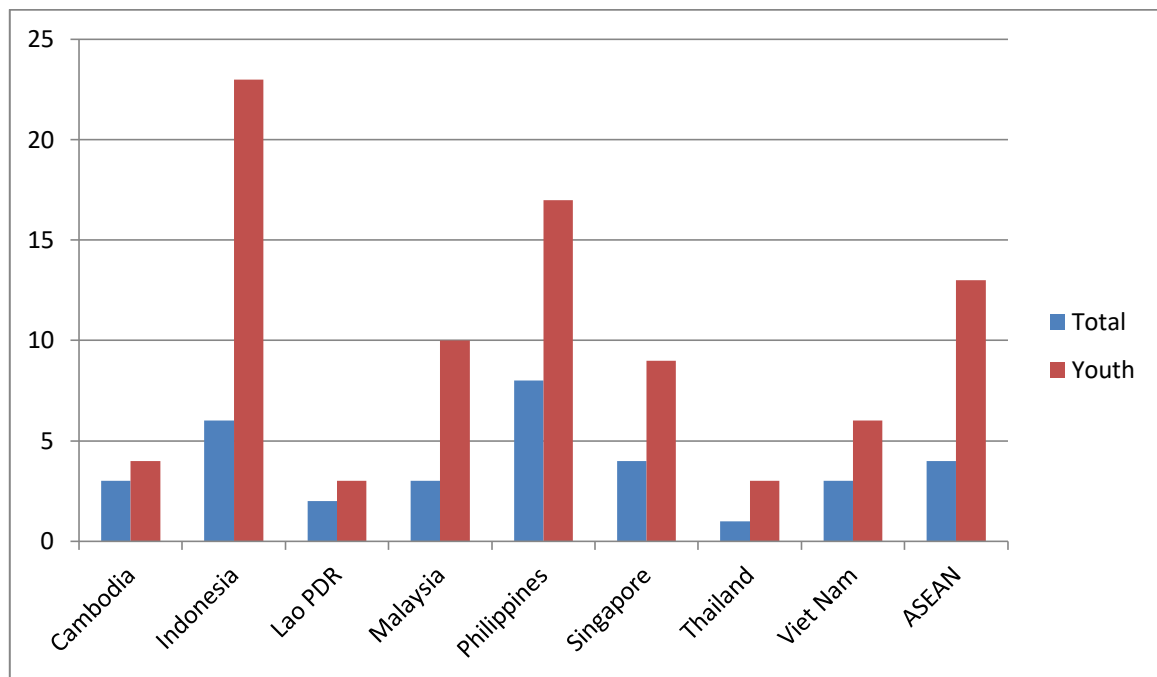
		0s) ^(a)	Literacy rate, 15+ ages (%)	TVET enrolment rate (%)	Tertiary gross enrolment (%)		International \$) ^(d)
ei	Brun	186	95.4	11.4	24.3	---	100,01
odia	Camb	740	73.9	2.3	15.8	121	3,989
nesia	Indo	,193	92.8	18.0	27.2	174	9,848
PDR	Lao	80	72.7	0.8	16.7	119	5,396
ysia	Mala	785	93.1	6.8	36.0	609	35,751
mar	Myan	121	92.7	---	13.8	---	2,828
ppines	Phili	022	95.4	---	28.2	206	10,026
pore	Singa	44	95.9	11.6	---	3,5	98,072
and	Thail	398	93.5	15.4	51.4	357	14,754
am	Vietn	246	93.4	---	24.6	181	5,440

SOURCE: ILO and ADB

Table 20. Selected labour market indicators in ASEAN, most recent year

In Table 20, it can be seen that the ASEAN member states differ in terms of supply, skills, wages and productivity. Singapore, according to the data, has the highest money wage while Lao PDR has the lowest. In regards with the Labour productivity, Brunei is the highest, followed by Singapore and then Malaysia. It can be observed that Productivity varies greatly and correlates with the skills of the workers.

In Figure 5, the unemployment rate of each member states is shown.



SOURCE: ASEAN COMMUNITY 2015

Figure 5. Unemployment rate, total and youth, most recent year (per cent)

It can be seen from the data that a lot of Indonesian youths are unemployed, followed by the Filipinos while the Lao PDR and Thailand has the lowest number of unemployed youths.

The employment rate is shown in Table 21.

		TOTAL			
		2010	2011	2012	2013
A A R ES E D	BRUNEI	---	183	---	---
	CAMBODI	---	---	7,197	---
	INDONESI	108,208	109,670	110,808	112,760
	LAO PDR	3,021	---	---	---
	MALAYSIA	11,900	12,284	12,723	13,210
	MYANMA	---	---	---	---
	PHILIPPIN	36,035	37,192	37,600	37,917
	SINGAPOR	1,963	1,999	2,041	2,056
	THAILAN	38,692	39,317	39,578	39,112

VIETNAM	49,494	50,679	51,422	52,208
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SOURCE: ASEAN Community 2015

Table 21. Employment rate in 2010-2013 (thousand)

In relation to the total population of each ASEAN member states, Indonesia has the largest population and also has the largest employment rate followed by Vietnam which has the third largest population. Philippines which has the second largest population falls fourth in the employment rate.

With the above information, it can be seen that even though the Philippines has the second largest population, it is still behind in regards to employment rate. This just implies that the unemployment rate of the Filipinos is high. With the ASEAN Integration, this is quite concerning.

In Table 22, the employment of the ASEAN member states in different occupations are shown.

OCCUPATION	INDONESIA	MALAYSIA	PHILIPPINES	SINGAPORE	THAILAND	VIENTIANE
1. Professionals, technical and related works.	3,429	2,573	2,787	733.4	3,262	4,613
2. Administrative, executive and managerial workers	252.9	695.5	5,989.5	349.6	1,213.9	551.0
3. Clerical and related works	4,352.9	1,189.5	2,147.2	268.0	1,376.4	881.5
4. Sales workers and services workers	20,928.6	2,866.1	6,931.3	256.4	7,191.0	8,461.8
5. Agricultural, animal husbandry and forestry workers; fishermen and hunters	38,203.4	1,162.9	5,198.5	-----	13,991.6	6,280.4

6.								
Production and related works, transport equipment operators and labourers.		21,3	3,06	14,50	380.1	7,47	9,9	
	53.2	0.4	3.0			0.8	11.9	
Others		301.	1,66	113.0	68.7	4,44	21,	
	7	3.3				8.5	459.1	
Total		88,8	13,2	37,67	2,056	38,9	52,	
	16.9	10.1	0.0	.2		49.1	205.7	

SOURCE: ASEAN Statistical Yearbook

2014

Table 22. Employment of selected ASEAN-member states by Occupation

It can be seen that in the professional sector, Vietnam has the most employed citizens while Philippines has the largest employment in the Administrative and Managerial workers. In the third, fourth and fifth classification, Indonesia has the largest share of employed citizens while Vietnam has the largest employment in other occupations.

With these information, the researchers can then assumed that Filipinos have more employees in administrative sector than any other member states while the largest share of employment rate in the Philippines belongs to the Production and related works, transport equipment operators and labourers sector.

C. IN-DEMAND JOBS IN THE ASEAN-MEMBER STATES

The researchers, to know the in-demand jobs in each ASEAN member states, have gathered information from trusted and reliable sources online and these are the secondary data they have gathered.

“Brunei needs more male youths to pursue a career in nursing,” Hjh Siti Mariam said, the Deputy Permanent Secretary of Health (Administration and Finance) in The Brunei Times. She also said that Brunei needs more male nurses to cater the male patients. (2015)

Cambodian students, on the other hand, chose to study accounting, the second most popular area of focus after English according to statistics from the Ministry of Education, Youth and Sports. However, according to National Employment Agency, while those people who seeks accounting, audit and taxation jobs constitutes to 13.5 percent when such jobs only has 5.8 percent of employer needs. (2013)

Chemistry, physics, biology, design, geography, sociology, psychology, fine arts and public administration, on the other hand, are less popular with less than 1,000 students enrolled which has the possibility to be in-demand because according to Kieng Rotana, vice president of Pannasastra University of Cambodia, “Students who choose subjects that few are interested in will easily get a high income since its demand in the market.” Professor Som Chan Sovandra, the vice director of the psychology department at the Royal University, on the other hand, said, “In the Cambodian context, there are a lot of jobs available for psychology students.” (Phearon and Sokunthea, 2013)

Regarding Indonesia, a special professional recruitment firm Robert Walters' director Rob Bryson told The Jakarta Post that, "A good command of written and spoken English is a qualification job-seekers looking to join multinationals in Indonesia must possess. As more companies work toward increased cohesion among business units, professionals who understand the business partnering role of their function are highly sought after." Bryson also said that there is a high demand for skills among accounting and finance candidates, risk and compliance sector. There will also be more job opportunities for asset managers, investment bankers and insurance specialist. (2015)

For Lao PDR, according to Labour Minister OnechanhThammavong, it needs to bring in 70,000 more foreign for the country has a shortage of skilled labour. She added that with the lack of trained domestic workforce, 90,000 foreign workers are required to be employed to meet the demands of business operating in the country. (Vandenbrink, 2013)

A senior adviser to the Lao National Chamber of Commerce and Industry shared in the business forum in Vietiane that the country needs more than 31,000 workers in the garment, processing, tourism, steel, furniture, and construction industries. (2013)

The most in-demand jobs in Malaysia are taken from a data compiled by human resource and jobstreet.com.my. Some of these jobs are Chief Financial Officer, HR Business Partners, Compensation and Benefits Specialist, IT Support Specialist, Software Developer, Engineering Manager (oil gas), Development Geologist, Drilling Engineer, Sales Manager, Social Media Manager and Business Development Manager. (2013)

In an article written by JafwanJaafar, a list of in-demand jobs in Malaysia is also given. Some of the jobs that are included in the list are Data Scientist, Web Designers and Developers, Environmental and Waste Management Engineers, Personal Financial Advisers, Personal and Home Care Aides, Marketing Managers and Information Security Analyst. (2016)

With Myanmar, Lynette Chong, Marketing Director of work.com.mm said that, "Myanmar is opening up and thousands of companies are flocking into this beautiful country to become the first mover in their respective industry. What we are seeing now is impressive growth in the job market. Many industries are hiring at the moment especially in the banking and telecommunications sector." (2015)

The most vacancies by job categories in Myanmar are Accounting, Sales, IT/Software, Education/Training and Admin. The top hiring Industries, on the other hand, are Computer/IT, NGO/INGO, Construction and Telecommunication services.

Henry Motte-Munoz, following the list of the Department of Labour and Employment, has compiled in his article the in-demand yet hard-to-fill occupation in the Philippines in the year 2013-2020. The kinds of people that are included in the list are the following: Doctors, Engineers, Accountants, Computer Programmers, Draftsman, Animators, Agriculturists, Electricians and Teachers. (2016)

Josh Bianc, in his article written, stated that sugarcane farming landed as the second in-demand job in the Philippines, as what Phil-job.net provides while Business Process Outsourcing or BPO is the most in-demand job. Other in-demand jobs in the country are Domestic Helpers, Service Crew, Commercial Sales Representatives, Customer Service Assistants, Credit and Collection Specialist, Cashiers, Staff Nurses, Cooks, Sewers, Production Machine Operators, Salesclerk, Waiter, Metal Arc Welder and Security Guard.

(2016)

For Singapore, according to a new report by staffing firm Kelly Services, the highest-paying jobs are in these five sectors: information technology (IT), accounting, sales and marketing, banking and finance and the healthcare and life sciences. (Williams, 2016) Cash Mart, a website, also listed some in-demand jobs in Singapore. The following jobs are Secretaries, Administrative Assistants, Office Support, Skilled Trades, Supervisors, Labourers, Sales Representatives, Drivers, Engineers, Accounting and Finance, Teachers and IT staff. (2016)

On the other hand, the most in-demand job in Thailand is still teaching. (Work Permits, 2015) While in Vietnam, according to HR2B Recruitment, the greatest demand has been the candidates in: Sales, Information Technology, Business Development, Accounting, Marketing, Engineering, Human Resources, Manufacturing, Quality Control, Administration/Secretarial and Medical and Health. But bear in mind that in Vietnam, Vietnamese workers are taken priority. Foreigners may be employed but it only happens when there is no other local alternative. (Just Landed, 2016)

Out of these information, Table 23 shows the mentioned jobs in each ASEAN-member states.

COUNTRY	IN-DEMAND JOBS
Brunei	Nursing (Male)
Cambodia	Psychology
Indonesia	Asset Managers
	Investment Bankers
	Insurance Specialist
Lao PDR	Garment Industry
	Processing Industry
	Tourism
	Steel Industry
	Furniture Industry
	Construction Industry
Malaysia	Chief Financial Officer
	HR Business Partners
	Compensation and Benefit Specialist
	IT Support Specialist
	Engineering Manager (Oil Gas)
	Development Geologist
	Drilling Engineer
	Sales Manager

Myanmar	Social Media Manager
	Business Development Manager
	Data Scientist
	Web Designers and Developers
	Personal Financial Advisers
	Personal and Home Care Aides
	Marketing Managers
	Information Security Analyst
	Accounting
	Sales
Philippines	IT/Software
	Education/Training
	Admin
	Doctors
	Engineers
	Accountants
	Computer Programmers
	Draftsmen
	Animators
	Agriculturists
	Electricians
	Teachers
	Sugarcane Farming
	Domestic Helpers
	Service Crew
	Commercial Sales Representative
	Customer Service Assistants
	Credit and Collection Specialist
	Cashiers
	Staff Nurses
	Cooks
	Sewers
	Production Machine Operators

	Salesclerk
	Waiter
	Metal Arc Welder
	Security Guard
Singapore	IT
	Accounting
	Sales and Marketing
	Banking and Finance
	Healthcare and Life Sciences
	Secretaries
	Administrative Assistants
	Office Support
	Skilled Trade
	Supervisors
	Labourers
	Sales Representatives
	Drivers
	Engineers
	Teachers
Thailand	Teachers
Vietnam	Sales
	IT
	Business Development
	Accounting
	Marketing
	Engineering
	Human Resources
	Manufacturing
	Quality Control
	Administration/Secretariat
	Medical and Health

Table 23. In-demand Jobs in each ASEAN member states

The researchers organized and classified the jobs according to the type of occupation as provided by the International Labour Organization (ILO) and the result is provided in Table 24.

Occupation	In-demand Jobs
Managers	Social Media Manager
	Business Development Manager
	Sales Manager
	Engineering Manager (Oil Gas)
	Marketing Manager
	Psychology
Professionals	Data Scientist
	Nursing
	Compensation and Benefit Specialist
	IT
	Web Designers and Developers
	Software Developers
	Doctors
	Information Security Analyst
	Environmental and Waste Management Engineers
	Development Geologist
	Healthcare and Life sciences Engineers
	Credit and Collection Specialist
	Insurance Specialist
Technician and Associate Professionals	Technicians
	Investment Bankers
	Banking and Finance
Clerical Support Workers	Secretaries
Service and Sales Workers	Personal and Home Care Aides
	Cooks

	Customer Service Assistance
	Cashiers
	Salesclerk
	Waiter
	Commercial Sales Representatives
	Service Crew
	Sales Representatives
	Security Guard
Skilled Agricultural, forestry and Fishery Workers	Agriculturist
	Sugarcane Farming
Craft and Related Workers	Garment
	Metal Arc Welder
	Sewers
	Draftsmen
	Animators
	Construction Workers
	Furniture Makers
Plant and Machine Operators, Assemblers	Production Machine Operators
	Drivers
Elementary Occupation	Domestic Helpers
	Labourers
Armed Forces Occupation	----

SOURCE: See Table 23

Table 24. In-demand Jobs according to Classification of Occupations

The researchers also combined and tallied the in-demand jobs according to the times it is mentioned in each ASEAN member states and the result is shown in Figure 6.

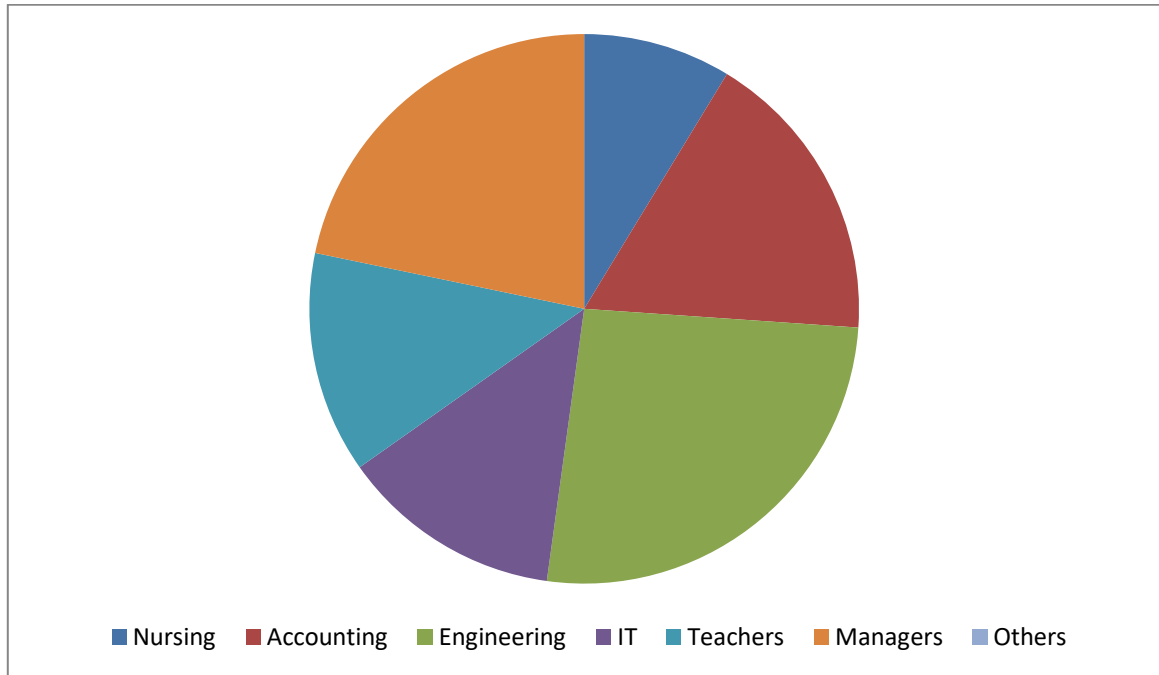


Figure 6. Tallied in-demand jobs

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter, the summary of the research and the conclusion are presented. Recommendations for upcoming researches are also offered by the researchers.

SUMMARY

As the ASEAN Community 2015 was implemented, the Southeast Asian region became a single market. This means that there is a free flow of goods, skilled workers and products between the ASEAN member states. With these, job-seekers from different ASEAN member states can now work in the Philippines while Filipinos can also work abroad. The ten-year curriculum of the Philippines was replaced by the K to 12 Program for the graduates of the old curriculum were still unequipped in the workplace.

In this study, the researchers used secondary data. The ten-member states are the respondents of this study, thus, information about these states were garnered by the researchers. The main aim of this study is to produce a list of in-demand jobs in each ASEAN member states to be a guide to Filipino job-seekers in their quest of finding jobs within the Philippines or abroad if they wish to in the year 2017. To come up with the list,

the researchers first did an in-depth research about the ASEAN member states of their background profiles alongside their education system. The employment and unemployment rate were also gathered and analyzed by the researchers.

The review of related literature tackled about the reason behind why K to 12 was implemented and how important it is in the ASEAN Integration. The background of Association of Southeast Asian Nations is also given alongside its ten-member states. ASEAN Economic Community was also talked about. Opinions from different officials and infamous people about these topics were also compiled and provided.

With the help of the secondary data, the researchers found out that most of the education system of the ASEAN member states has either 11-year or 12-year curriculum. The Philippines also has a high unemployment rate although it has the second largest population in Southeast Asia. A list of in-demand jobs were also produced at the end of the study.

CONCLUSIONS

With the creation of ASEAN Economic Community, the member-states including the citizens will be able to join in the free flow of capital, labor, services, goods, and foreign investments. In this research, the researchers acquired data from the 10 member of the ASEAN to know the in-demand jobs in each ASEAN-member states and list the possible jobs the Filipinos can apply either locally or abroad in 2017.

The 10 countries have different enrolment rate, survival rate of students in primary, secondary, and tertiary level, employment rate, supply, skills, wages and productivity. Singapore has the highest money wage while Lao PDR has the lowest. With regards to the labor productivity, Brunei is the highest, followed by Singapore then Malaysia. Out of the 10 member-states of ASEAN, Indonesia has the highest number of unemployed youth and followed by the Philippines. But on the contrary, Indonesia, having the largest population, has the largest total of employment rate. The country which has the lowest number of unemployed number of youth is Thailand. Philippines which has the second largest population falls fourth in the employment rate. Despite having the second largest population of the ASEAN members, the Philippines still falls in fourth of the employment rate.

The reason for this may be because of the 10-year curriculum of the Philippines before. Being a competitive country and as a member of the ASEAN, the implementation of K-12 Program in the Philippines is a big help to the country in the competition in entering the labor force. Filipino professionals will be more prepared for work. The graduates of the new curriculum will have a bigger chance of being employed.

The 10 members of ASEAN have different in-demand jobs in their country. From all the in-demand jobs of the different ASEAN member-states, the most in-demand job in Southeast Asia is engineering followed by manager, accounting, teaching, nursing, and IT. Locally, in the Philippines, the in-demand jobs are Doctor, Engineering, Accounting, Computer Programming, Draftsman, Animating, Agriculturist, Electrician and Teaching.

RECOMMENDATIONS

The purpose of this study is to know the in-demand jobs in each ASEAN-member states and the possible jobs the Filipinos can apply in the year 2017. The researches recommended study on the in-demand jobs of the ASEAN countries beyond 2017. Also, a

study to compare the number of graduates in 2017 and their courses taken of the 10 Southeast Asian countries is recommended. After acquiring the exact number of college students, their courses will be compared to know what course has the highest number of takers. From the data acquired, the researches will be able to know the course would have the biggest competition. The bigger number the students who take the course, the bigger the chance of being employed. The recommended study's purpose is to know what course is best to take and would have the bigger chance of getting employed in other Southeast Asian countries.

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